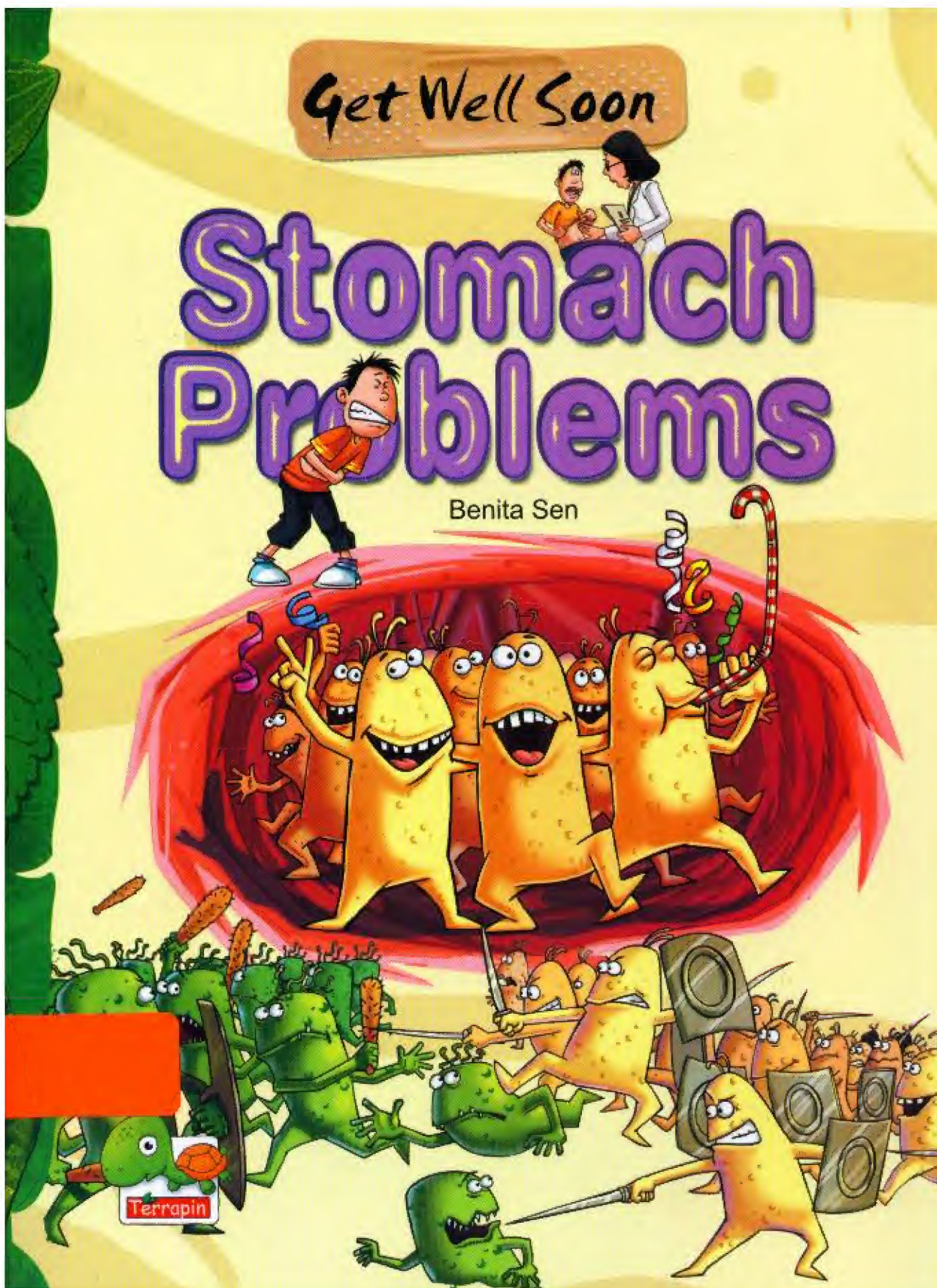


Get Well Soon

Stomach Problems

Benita Sen

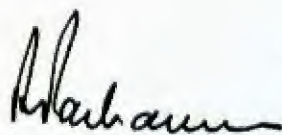


A note by Dr R K Pachauri

Human beings have made great progress in recent years. We have been able to produce a large number of goods and services on a huge scale, and have utilized technology in a wide range of activities. However, all this has come at an increasing cost which has often remained concealed or ignored. Our bodies of water have been polluted. The air around us has a large amount of particulate matter and gases that are not only harmful for our health but also affect the climate of the earth. Overall, we have neglected to take care of planet earth which is home to all of us and all other living species.

Economic development is meant to ensure a higher level of human welfare in this generation as well as for others yet to come. But we know from everything we see around us that water borne and air pollution related diseases are increasing. We can conclude that while we try to give our children a better life, we also harm their health in actual fact.

This series takes a look at some of the common ailments children suffer from, such as stomach problems, allergies, injuries, and fever. While these are all part of growing up, they are becoming a cause of concern, to both parents and their children, primarily because pollution has aggravated these maladies. The books not only focus on the science behind the causes of these ailments; they also point out ways to avoid them. Above all, the objective is to take the scary element out of these common maladies and ensure that the growing-up years are full of fun. Those who read these books would learn how to lead healthy and happy lives.



R K Pachauri

Director-General, TERI

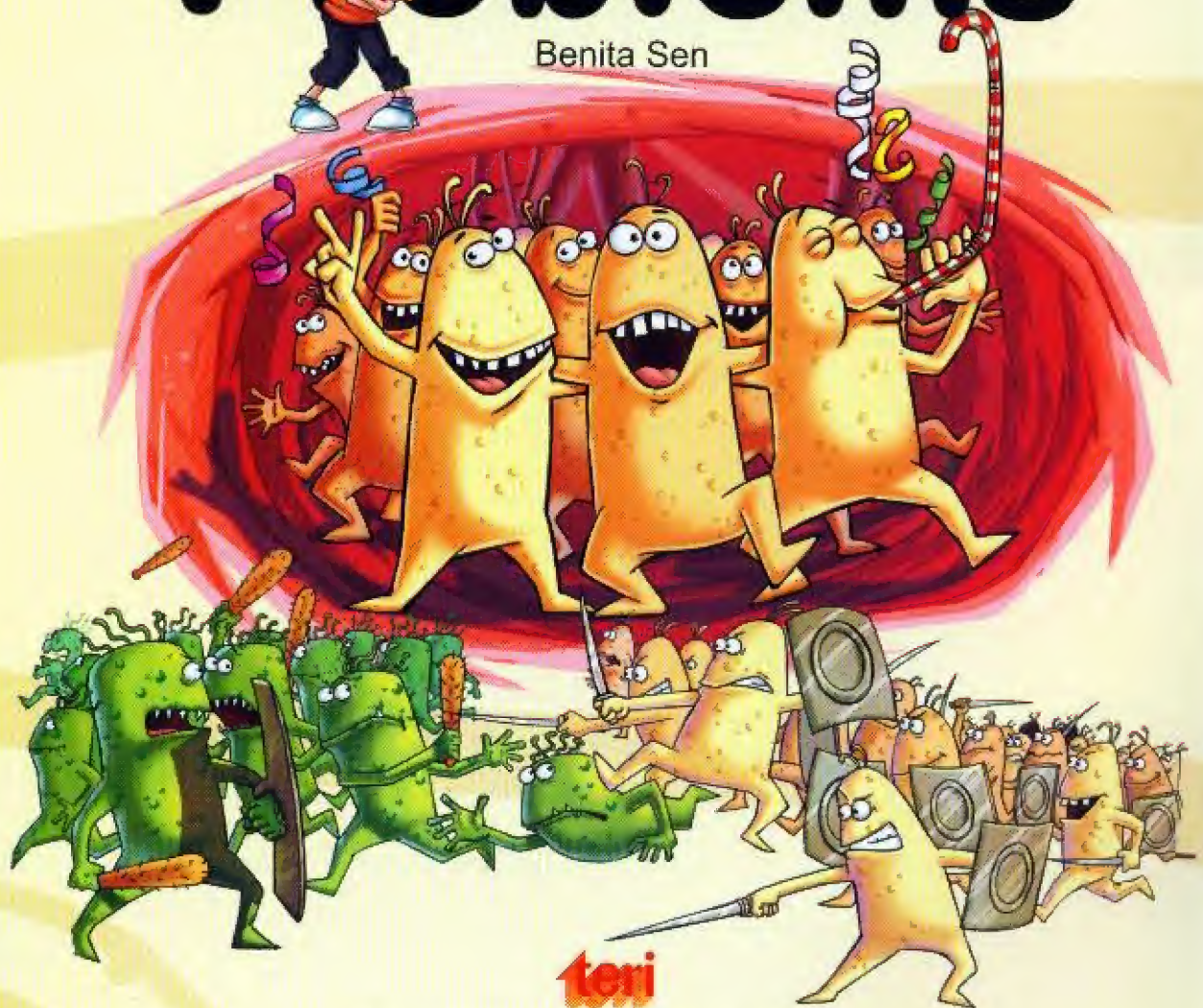
Chairman, Intergovernmental Panel on Climate Change

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Benita Sen



teri

The Energy and Resources Institute



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Disclaimer: This book has been reviewed by a medical practitioner and is meant for general educational purposes only. It should not be considered as a substitute for medical advice. The information provided in this book should not be relied upon to make decisions about a child's health. The family doctor should always be consulted about individual condition(s) and/or circumstances.

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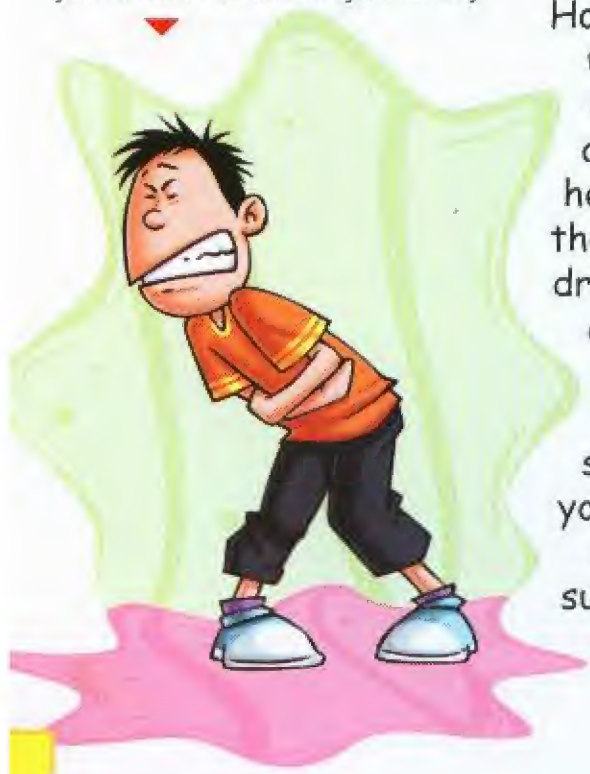
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GERM ALERT!



Stomach cramp is a sharp pain around your navel or lower down your tummy.



How do you know your stomach is not well? It lets you know in different ways. When your stomach is attacked by germs, it cries out for help. These germs remain hidden in the food you eat or in the water you drink. And when they attack, they cause a sharp pain around your navel or lower down your tummy.

This pain is called a cramp. It is so sharp that you will probably clutch your stomach and bend forward.

At other times, germs can attack suddenly, and your stomach might not get the chance to warn you.



Some stomach problems make you rush to the toilet.



RHYMEY TUMMY TIME

Ouch! Help! Ouch! Mummy...
I heard my tummy-tum cry.
My stomach's very dear to me
If it's hurt, so am I!



That is when you will want to run to the toilet, and pass a plug-your-nose smelly, watery poo. The doctor gives poo another name: stool.

Some germs in your stomach can make you feel like throwing up your last meal. Even after all the food in your stomach seems to have come out, you may still feel like vomiting, and throw up water.

As soon as any one of these three problems—stomach cramps or running to the toilet or throwing up what you ate—starts, it is time to tell your parents that you have a stomach infection!

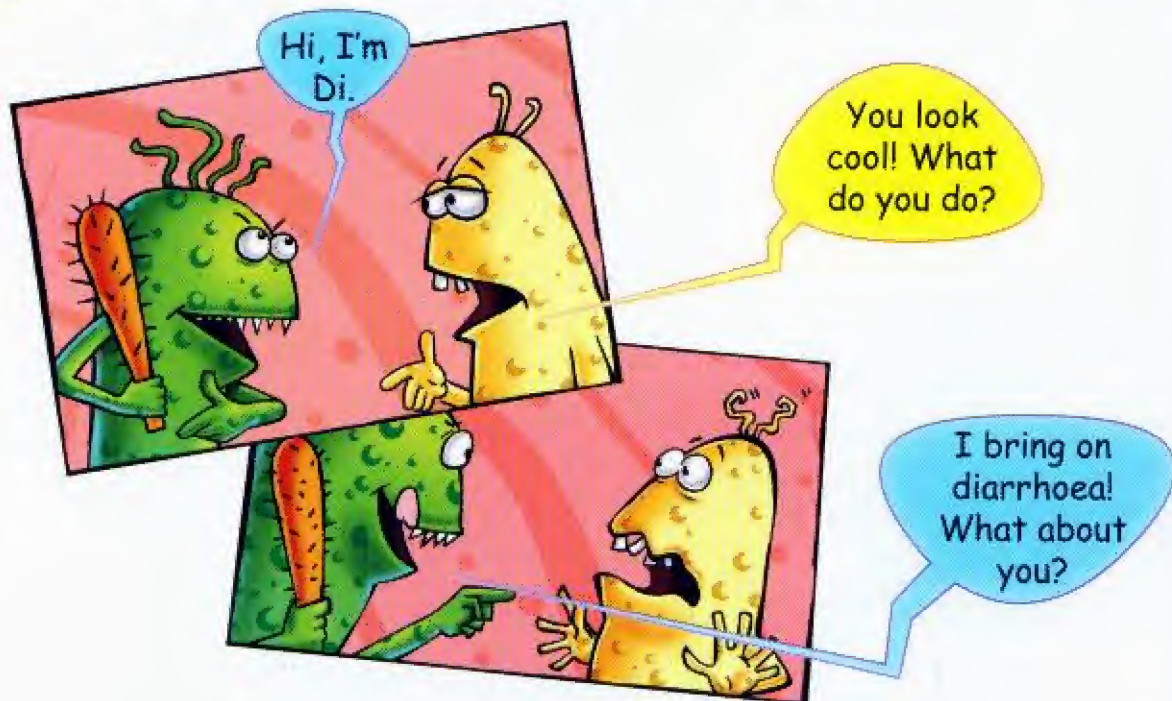
BELLY SMART

If you have a runny tummy and are passing loose or watery stool several times a day, it means you have diarrhoea. But do not worry. It is very common. In fact, you will find it difficult to meet someone who has never had diarrhoea!

Sometimes when you have an upset stomach, you will hate the sight of food. ▶

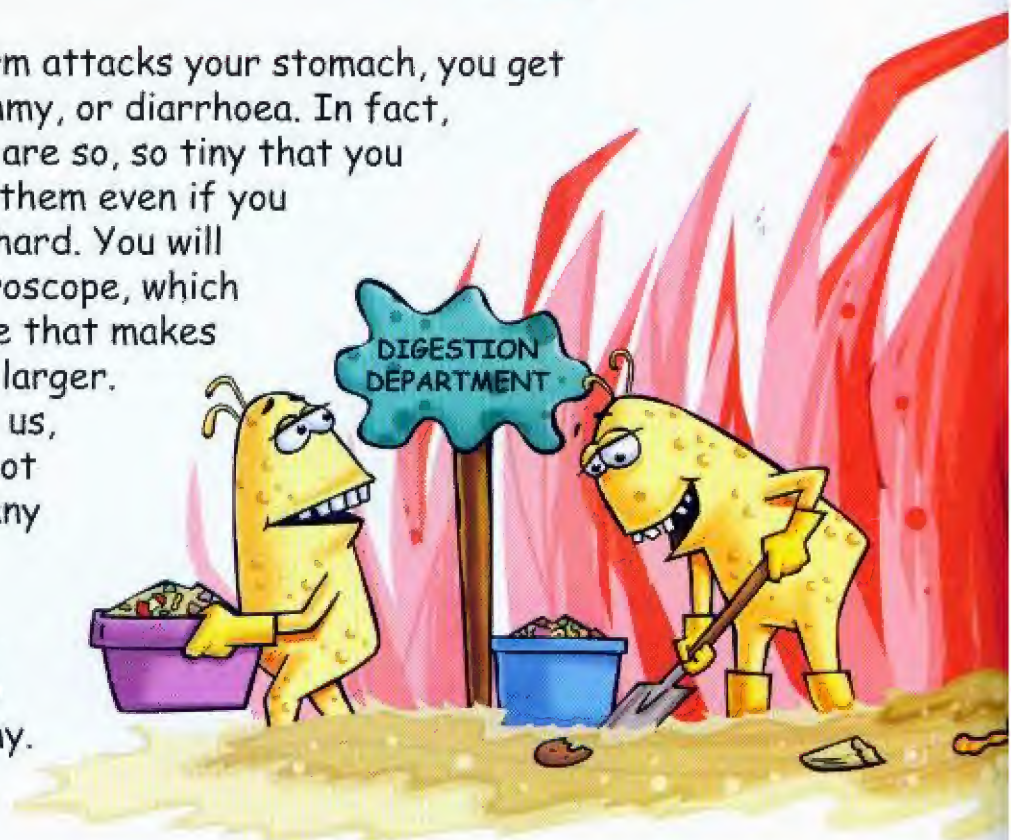


UFF! THESE BUGS!



When a germ attacks your stomach, you get a runny tummy, or diarrhoea. In fact, these bugs are so, so tiny that you cannot see them even if you look really hard. You will need a microscope, which is a machine that makes things look larger.

Sadly for us, there are not one, but many different kinds of germs that can cause a runny tummy.





RHYMEY TUMMY TIME

Germs are sneaky, they just wait for a chance
To attack our bodies, and do a painful dance!



A virus is a germ that lives inside plants or animals. It grows there, and becomes many. When all these viruses attack our stomach, it becomes sick.

A bacterium is also a tiny creature. Two or more bacterium are called bacteria. There are good bacteria and bad bacteria. Both of these live in our stomach. The good bacteria work on the food we eat. They separate the useful part of the food and turn the rest into waste. It is the bad bacteria that cause stomach upsets.

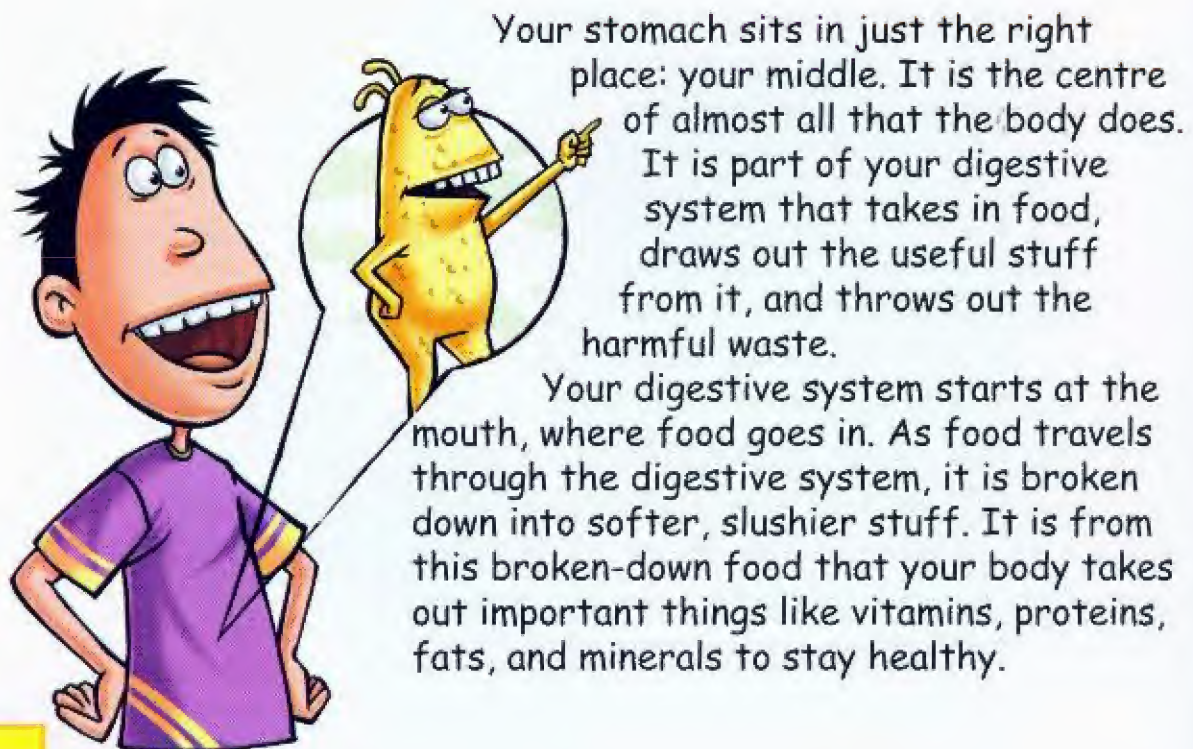
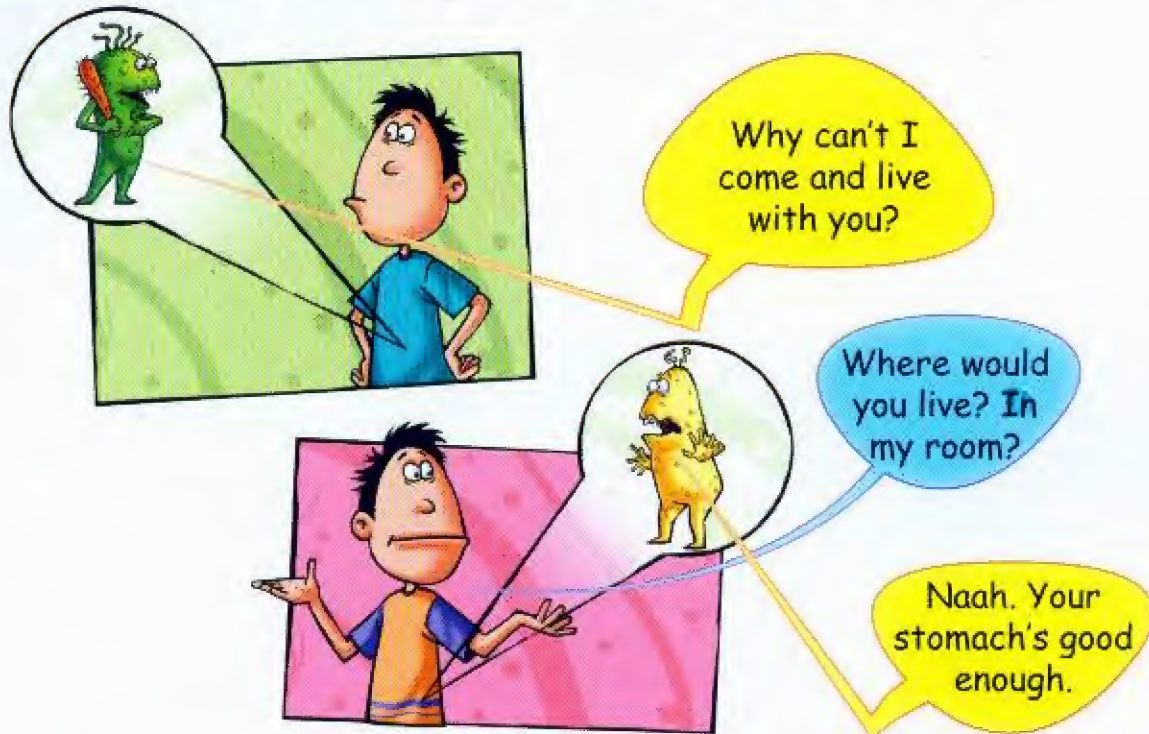


The good bacteria help us digest our food, while the bad bacteria harm our stomach.

BELLY SMART

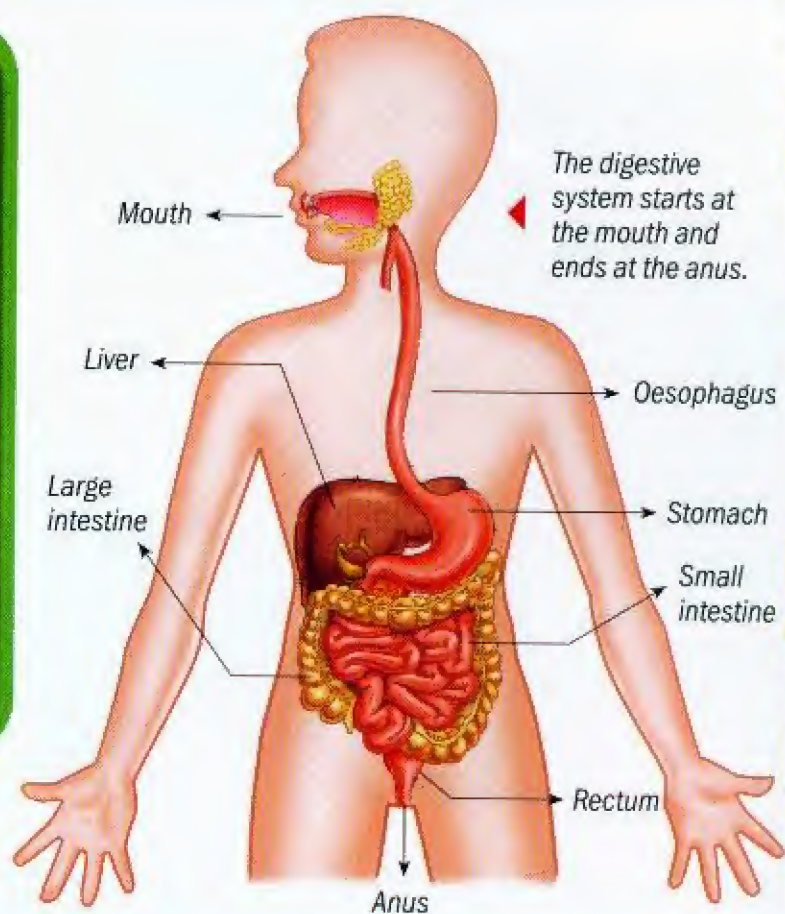
Bacteria are found almost everywhere on the Earth. Most of them are harmless, and some even help us. Who do you think turns milk into curd or cheese?

FOOD IN, WASTE OUT



BELLY SMART

The small intestine is longer than the large intestine! In an adult, it can be 22 feet in length. Just imagine 22 long rulers lying end-to-end! The large intestine, however, is just about 5 feet long.



RHYMEY TUMMY TIME

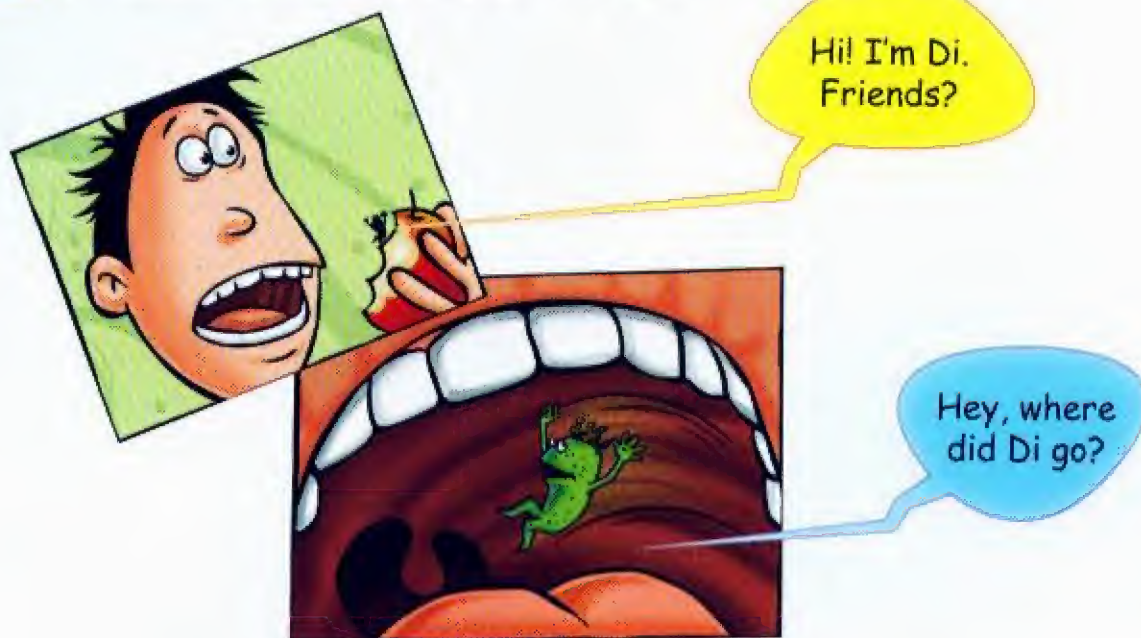
My stomach is important, when it gives a little whine.
I need to get it healthy again, so I can stay just fine.



The digestive system also includes the food pipe, or the oesophagus. The stomach looks like a sack, and is shaped like the letter 'J'. Below the stomach lies the rope-like small intestine, while the large intestine lies even lower.

The unwanted part of the food you eat (or the waste) collects in the rectum, which resembles a tube. The waste remains there till your body tells you to throw it away. That is when you need to go to the toilet. The waste comes out from the rectum as stool, and leaves your body through the anus. This is the little hole right under you. It is where the digestive system ends.

ALL ABOUT DI



Diarrhoea germs hide in many places. They live in the stomachs of people and animals. A favourite hiding place for diarrhoea bugs like Di is a dirty hand. If you do not wash your hands well, these bugs will remain on them. For example, when you touch a doorknob, some of these germs land on it and lie in wait. As soon as another person touches the knob, they jump on to his or her hand. This is how these bugs move from one person to another.

Once a germ lands on your hand, it can travel right inside your body when you touch that hand to your mouth. Diarrhoea bugs also live in dirty, or unfiltered water like tap water. When you drink that water, the bugs reach your stomach.



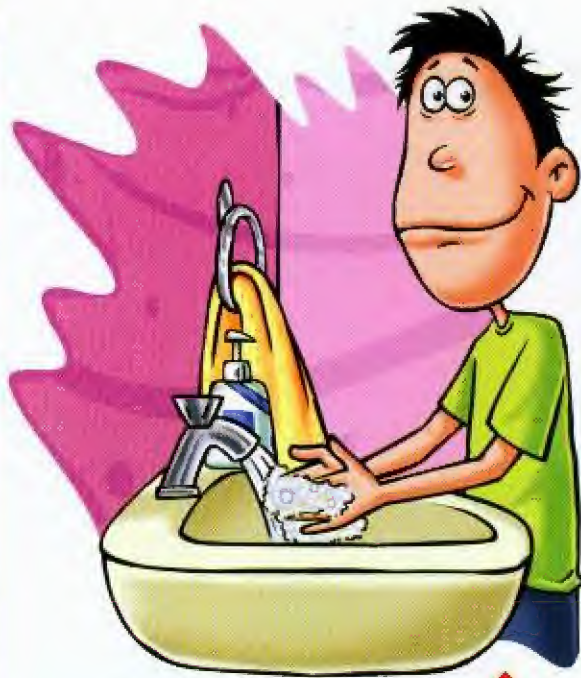
RHYMEY TUMMY TIME

My name is Di, I live happily in stool.
You'll find me on dirty hands, and in filthy, smelly pools.



BELLY SMART

Diarrhoea is not always caused by an infectious germ. You can also have diarrhoea if your stomach does not like certain food, like prawns. Some people get a runny tummy whenever they drink milk. Then there are those, who get loose stool from worrying too much!



Washing your hands with soap is the best way to prevent germs from spreading.

Stomach bugs leave our bodies through stool. In some villages, where there are no toilets, people go to the fields to pass stool. Often, dry stool of both people and animals used to make crops grow better, so bugs from inside the stool can enter the vegetables growing on these fields. That is why, vegetables should always be washed before they are cooked. Also, if these vegetables are not cooked properly, the germs will land directly where they want to be: inside you!

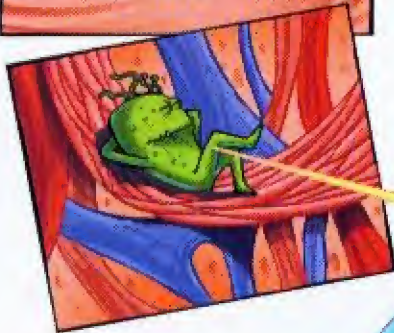


Always wash raw fruits and vegetables under running water before eating or cooking them.

BATTLE IN YOUR BODY



Zippy!
Here I
come!



Yawn! Let me
rest a little
before I
attack.



Ugh! Can't
bear to look
at that pizza!
Wonder why?

Using a clean fork and
spoon can prevent
stomach problems.



Your body knows friends from foes. When harmful germs like *Di* enter your body, a battle begins. These clever, little bugs go into hiding once they reach the digestive system. Some of them can remain hidden for six hours. And some are really patient. They can lie in wait for up to a week and sometimes as long as a month, before they declare war!

Even inside your dark stomach, these bugs make sure that they feel comfortable! As they settle down, they start feasting on the food you eat. Very soon, with the germs eating up as much as they can, the share of

food left for your body becomes less. Since we get energy from food, you start feeling tired. In fact, very soon you might feel so weak that you will not feel like eating even your favourite food.

Sometimes, you might start feeling feverish. Fever is your body's weapon to fight the harmful germs by making your body an uncomfortable place for these bugs to live in. The germs then fight back by releasing poisons or toxins. These toxins make you throw up and run to the toilet. The battle is on!

BELLY SMART

Di and her friends are everywhere, even in the freezing Antarctica! In 1909, when Ernest Shackleton, a British explorer, and his group were coming back to their ship after exploring Antarctica, they almost missed the boat. The reason: Dr Eric Marshall, one of the team members, had diarrhoea!



The bad germs in your stomach eat a large share of the food you eat.



RHYMEY TUMMY TIME

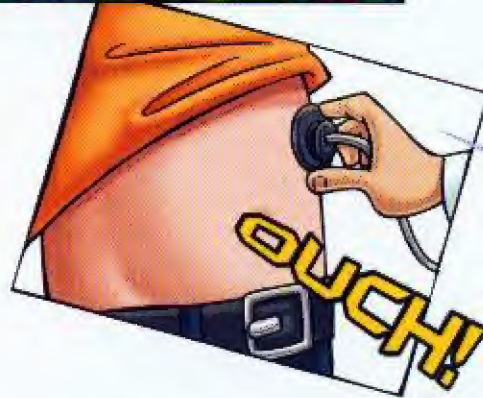
We are the bug army and the battle's just begun.
We'll beat you hollow and have loads of fun!



DOC TO THE RESCUE!



Oh yeah, oh yeah, we'll have loads of fun!



Hmm... Let's see where those Di devils are hiding.

As soon as you start feeling that a battle has begun inside your stomach, inform your parents, and visit a doctor. A doctor is like a detective. When you tell her your stomach is not feeling well, she immediately starts looking for clues. First, she will feel around your stomach to find out where it hurts. This will tell her exactly where in your stomach the bugs are having fun.

Your doctor can sometimes ask you to avoid certain foods. ▶





RHYMEY TUMMY TIME

The doctor is my friend.
She's written the name of the pill
That will knock the germs clean out
And make me well from ill.



If that does not help, the doctor will start asking both you and your parents a number of questions. She will want to know things like what you have eaten, how many times you have passed stool, and if you feel like you are going to throw up. It is important that you have answers to all her questions. After all, you are now part of the detective's team!

If she is still not sure, she may ask your parents to get your blood or stool tested. The tests are done in a special place called a laboratory. There, other doctors will study your blood or stool through microscopes to find out exactly which germ has attacked your stomach.

Doctors in laboratories run tests to find out more about the germs in your stomach.



BELLY SMART

Sometimes, the doctor might pinch you to check if your skin puckers up. If it does, it means you have lost a lot of water passing watery stool, and have become dehydrated.

THE BUGS FEEL BLUE!

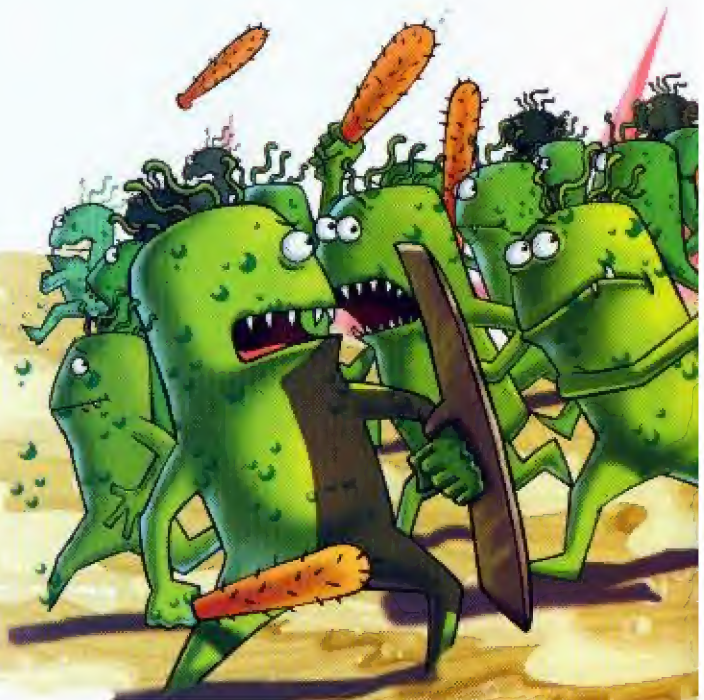


The right medicine works like magic! Most medicines for diarrhoea start working right away. You know the capsules are winning the war against Di's army, when you start going to the toilet less often. Gradually, the pain in your stomach also goes away.

The earliest-known medicines for all illnesses

BELLY SMART

At times, indigestion can also bring about diarrhoea. In such cases, one of the best medicines to treat your upset stomach is a piece of dry ginger.





RHYMEY TUMMY TIME

My doctor tells me, medicines are my friend.
I'll take even the bitter ones, so that I can mend.



were found in nature. These included flowers, leaves, bark of trees, roots, and so on. Even today, we can take help from nature when we are suffering from illnesses like diarrhoea. For example, it is said that apples cure a runny tummy. So do carrot soup, mint juice, and buttermilk.

If you are suffering from mild diarrhoea, then chances are it will get cured on its own. Your body has its own way of fighting back. Remember, those good bacteria we spoke about? When the diarrhoea is mild, these good bacteria kill the bad ones in your stomach and you start feeling better again.

But if your condition does not improve within a day, you should ask your parents to take you to a doctor. It is only a doctor who can decide which medicine can kill off the nasty germs in your stomach.

If the good bacteria win the battle against the bad bacteria, your stomach can get better in a day.



FOODS THAT FIGHT BACK!



Want to get well sooner? There are some things that are sure to make your ill stomach start smiling again. However, you should always ask your doctor first what you should and should not eat and drink when you have diarrhoea or, for that matter, any other illness.

When you have a runny tummy, your body loses a lot of water, salts, and sugar. To help your body get these back, the doctor will ask you to sip oral rehydration salt, or ORS. It comes in a pack with a powder inside. The powder needs to be mixed with the exact amount of water that is mentioned on the pack. Remember, too much ORS could make you throw up, while too little of it will not do you much good, either. You should also keep drinking coconut water, barley water, whey water, or buttermilk.

Your doctor might also ask you to avoid eating nuts, dry fruits, salads, milk, sweets, fried foods like pakora, and spicy stuff like chutney and pickle. Some doctors might also tell you to stay away from chicken soup and fish for a few days since the germs like them, too!

BELLY SMART

Before ORS was available, many children with diarrhoea used to die of dehydration. If you do not have a packet of ORS near you, till the time you get one, mix salt and sugar in water and keep sipping it.



RHYMEY TUMMY TIME

When my tummy's sick, I may feel yucky and blue.
But I must eat and drink, what the doctor wants me to.



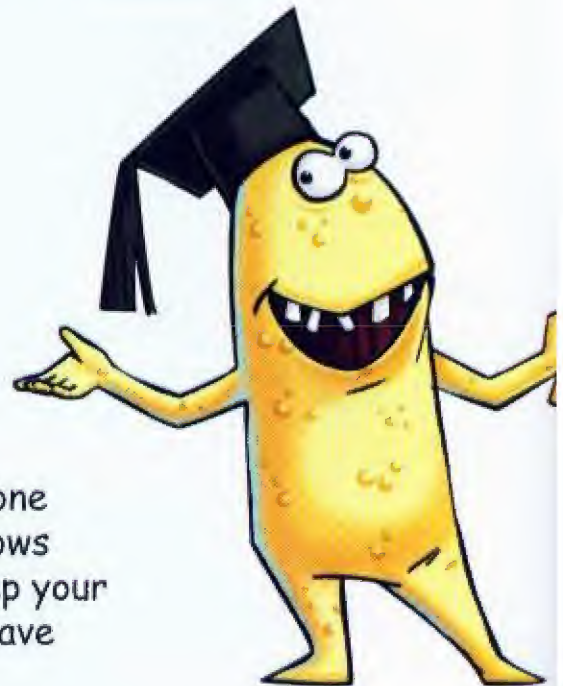
HAPPY TUMMY, HAPPY ME!



BELLY SMART

Is there an injection that can keep you safe from diarrhoea? Yes, there is! Rotavirus, which is the most common cause of diarrhoea among kids, can be kept away with an injection.

You will find it difficult to meet someone who has never had diarrhoea! This shows how common germs like Di are. To keep your stomach in good health, you need to have



healthy habits. Here are some simple things you can do to prevent diarrhoea in the first place.

- Wash your hands well after you have been to the toilet.
- Wash your hands after you touch things that are also touched by others, such as money.
- Make it a habit to wash your hands with soap before you eat.
- Keep your nails short, and make sure they are always clean. Try not to bite your nails.
- If you want to eat cut fruit or a fruit salad, rather than buying it from a street-side shop, ask your mother or father to make it at home.
- Before you bite into any fruit, wash it thoroughly with clean water.
- Make sure that the water you drink is clean and safe. For example, filtered water is clean. Fill a water bottle with clean water from your home and carry it to school.



RHYMEY TUMMY TIME

I must wash my hands
Before I eat my food.
I should not have stale stuff.
My stomach says, it's no good!



A GOOD SCRUB!



I can wash my hands faster than you.



See, I am done!

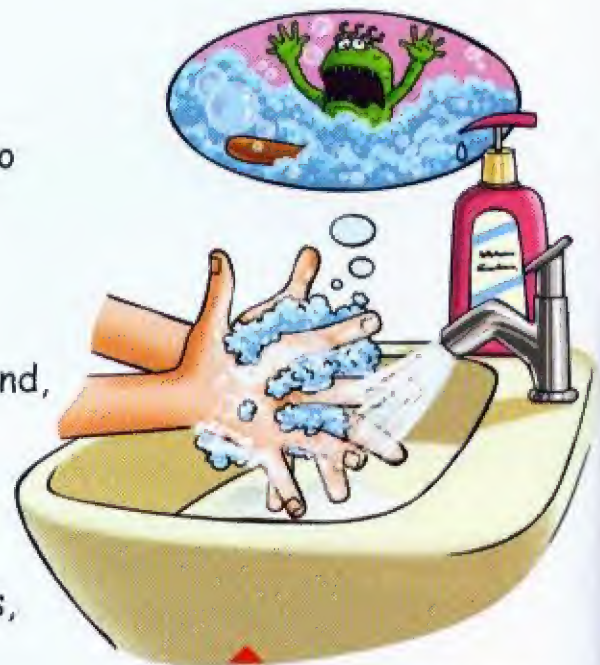
Are you sure you've washed all the germs off?

Doing something as simple as washing your hands well can help you stay healthy. If you do not wash them well, the harmful germs may not budge from your hands!

It's best to use a liquid soap
That no one else can touch.
But if there's none, any soap will do
Thank you very much!

Work it into bubbles
And lots and lots of foam,
Wash the palm and back of the hand,
Where nasty germs roam.

Wash the fingers, ten of them
Scrub under the nails.
Wash all the way up to your wrists,
A good wash never fails.



Use warm water (neither cold nor hot) to wash your hands.



When good bacteria win the battle over the bad ones, your stomach feels fine again.

Wash for 15 seconds
Or say your favourite rhyme.
Never miss a single chance
To have a jolly good time!

Rinse the soap off with water.
Use a clean towel to dry.
Now you're ready to eat your food
And bid stomach bugs goodbye!



RHYMEY TUMMY TIME

Scrub-a-dub, scrub-a-dub, wash-wash well.
Send nasty germs running pell-mell-yell!



WORDS TO REMEMBER



- **Bacteria:** tiny creatures that can only be seen under a microscope. Some of them cause diseases, while others are useful to us
- **Dehydration:** losing water from the body
- **Diarrhoea:** passing watery stool
- **Germs:** tiny bugs that make us sick
- **Microscope:** machine that makes small things look bigger
- **ORS:** also known as oral rehydration salt, this powder comes with the right amount of salts and sugar that your body needs when you have diarrhoea



**This is a
GREEN
book**





Stomach Problems

Pain in your stomach? Rushing to the loo time and again?
Feeling sick just looking at food? It could be your stomach telling you it has been attacked by germs! The good news is that you can get your stomach well again.

This book tells you how to do just that!
Learn about the good bacteria that fight the bad ones, what food to eat to get better fast, good habits that make sure your tummy is happy...and say 'Good bye' to stomach problems!

Other books in this series

Allergies
Fever
Injuries

Ages: 6-8

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